AIMS For a better birth...

# Why are more mothers dying?

AIMS Journal 2005, Vol 16, No 4

*Jean Robinson examines the latest Confidential Enquiry into Maternal Death in the UK1, and suggests that levels of substandard care are contributing to the rising death toll.*

"Are women dying because the care they receive in traditional or modern health services is inadequate or actually harmful?" - Why Mothers Die, 2000-2002

The latest edition of Why Mothers Die (Confidential Enquiry into Maternal Deaths) is refreshingly clear, and asks some radical questions. But it still reminds me of Dr Dolittle's Push-Me-Pull-You, which had a head at each end, so it could go in both directions. This latest report, like those on infant and cot deaths, reveals that our unequal society is a killer. But there is still a sense of litigation phobic doctors holding something back.

The good news is that publication has been speeded up so that the information can be used sooner to save lives. The flip side is that some reported deaths are now within the three-year time limit for legal action for medical negligence. This could lead to more caution in publishing information which might be useful in legal proceedings - particularly relevant to a bereaved father who may have to bring up his children alone. Over 1100 children have lost their mothers during the three years covered by this report.

Another important improvement is the more complete data collection, allowing even more deaths to be traced and fewer to be missed. Some deaths are not reported to the Enquiry by the doctors concerned (for example, those in private hospitals, included for the first time in the 1997-1999 report). And suicide deaths that happen nearly a year after a birth may not be seen as maternal deaths. These are now picked up from death certificates at the Office for National Statistics.

Despite AIMS' criticisms, no other country covers maternal deaths as completely as the UK, or studies them as closely. Only the UK analyses deaths up to one year, which means we have a more complete picture than those other countries that collect data only up to 42 days (as required by the World Health Organization). However, within AIMS, we continually point out that we have suicidal clients with babies more than a year old (mostly with post-traumatic stress disorder brought on by childbirth).

## The black hole in the data

Despite the improvements, the Enquiry is still based on case notes and information collected from staff alone. Although we have repeatedly asked the Enquiries into Maternal and Infant Deaths to gather information from relatives and friends who were present during labour and birth, they have failed to act.

There is no voice for the dead. We have made it clear that this policy is no longer acceptable to us, and shall be making the strongest possible protests. We know from our complaints work that there are often crucial differences between what the notes say, and what women and their birth partners experienced. This is particularly important when the notes comment that a women refused consent, delayed consent or did not attend. There may well be another side to those stories.

## Who's at greatest risk?

"Unwitting staff prejudices were revealed that may have had an effect on the care they provided" - page 22

The Enquiry can now compare the mothers who died with the survivors to identify groups at greatest risk. It is no surprise to learn that those in the most deprived areas of the country have a 42 percent higher death rate than women in families where both partners were unemployed and subject to "social exclusion" were 20 times more likely to die, and that ethnic minorities - including black African women, asylum seekers and refugees - have seven times the death rate of white women. Lack of interpreters (a disgrace) led to communication problems which could kill and also made a mockery of giving consent.

Women who died were more likely to be obese. Of those who died from direct and indirect causes, 35 per cent were obese compared with 23 per cent of the general female population. And 13 per cent of those who died had reported domestic violence.

Late bookers and non-attenders were also at higher risk, but many women had difficulty in accessing care.

## Substandard care

"There appeared to have been an increase in some healthcare professionals failing to identify and manage common medical conditions or potential emergencies outside their immediate area of expertise" - page 43

At the press conference, the full report was not available until the next day, so reporters wrote their stories from the press release, which concentrated on the success of the Enquiries in their 50- year history. Now only one in 19,000 mothers die compared with one in 1500 half a century ago. It is indeed a success story (but helped, of course, by better health, better housing, better contraception and legalised abortion).

But the press release did not mention that maternal deaths have actually risen since the previous report. The mortality rate is 13.1 per 100,000 births compared with 11.4 last time. There could be innocent reasons for this - more cases now being identified, an increase in refugees and asylum seekers, or just a chance variation.

On the other hand, quality of care may have fallen, and the report provides evidence of this. When we look at the numbers of deaths from each cause, we need to remember that the birth rate continues to fall.

For the first time, there were less than two million births in the three years covered by the report - 126,000 fewer than last time. So a small increase in deaths means a rise in the mortality rate.

Of the deaths due to direct obstetric causes, 67 per cent had substandard care (60 per cent in the last report), and 47 per cent of these were judged to be major, where a different treatment might have prevented the death.

## Change, please

"Current patterns of antenatal care services are not meeting the needs of the women most at risk of maternal death" - page 57

The report insists that services should have the flexibility to meet the needs of all women, including the vulnerable and the hard-to-reach. Those who fail to get antenatal care should be actively followed-up.

At AIMS, we have been telling the Department for years that services are putting off even women who are strongly motivated to use them (like those who want an NHS midwife for a home birth). So it is not surprising that they deter those who are ambivalent - for example, young teenagers and the increasing number of those afraid of unnecessary social services intervention. A mounting number of calls show that women are shocked and disappointed by their first antenatal visit, where they are pushed through the official tick-box agenda rather than asked how they feel.

The report suggests that women from minority groups be involved in planning services. That is not enough. Women don't need to be 'consulted'; they need power - and the ability to hire the type of care they want.

## The lost caesarean chapter

"Nowadays midwives may have no general nurse training, and with a caesarean section rate of around 20%, attention must be paid to education of midwives in post-operative management" - page 121

Having read all these reports from way back, I can't help noticing what isn't there. There is no chapter on caesarean deaths (there used to be), so I've written my own. The report says that because emergency C-sections are often done on women with serious problems, readers might think caesareans were the cause.

But this point has been made in earlier reports and we've never had any difficulty in understanding it - and neither have our members. We don't need to be treated like idiots. We know that crude death rates need to be interpreted with caution. These were: 48 deaths per 100,000 for vaginal births; 136 for scheduled and elective C-sections; and 208 for emergency and urgent sections.

So I trawled through various chapters to find causes of caesarean-related deaths under other headings. This isn't a complete picture, but gives an idea of causes. What we don't know, of course, is how necessary those operations were, so we can't tell how many deaths were avoidable because the woman could have had a successful vaginal birth.

There were nine post-caesarean deaths from thromboembolism (blood clots): caesareans increase the risk. Seven cases had substandard care. The fact that the death rate from this cause has not gone up in spite of the rising caesarean rate may be due to doctors following lessons learned from previous Enquiries - for example, using bloodthinning drugs like heparin or surgical stockings - and women following advice on air travel or other long journeys.

Six women died from *caesareans they had had before the fatal pregnancy*. Four bled to death from placenta praevia (where the placenta is so low down in the uterus that it obstructs the baby's way out, thus requiring a caesarean), which becomes more likely once a woman has a scar on the uterus. In these cases, caesareans were planned for 38 weeks, but three women died before then.

The problem may be compounded by inadequate care: one woman needed an urgent blood transfusion, but the cross-matched blood was out of date - even though the hospital staff knew it might be needed. A fifth mother died from placental abruption during pregnancy, when the scar of her previous Csection ruptured. The sixth died from blood loss when the scar of a previous section ruptured after vacuum extraction.

There were five deaths due to bowel perforation - all after caesarean section and all with substandard care. (There was only one such death in the previous report, and none in the one before that). One woman was discharged early, despite a rising pulse and falling blood pressure, and without medical review.

The report comments: "The rising caesarean section rate may be a factor in the increasing number of deaths from this cause" (page 120). They need not have been fatal. There was delay both in making the diagnosis and in postoperative care in these cases. The report suggests that quality of care has deteriorated.

Most women are discharged earlier nowadays, and complications may not be recognised quickly enough by community midwives (who visit less often). In this case, one of the five women died months after the birth. Her scar had separated and been restitched; then months later, she had abdominal pain, was readmitted and died - the bowel was joined to the scar.

There were four anaesthetic deaths (all general anaesthesia) in women having caesareans, and anaesthesia contributed to a number of other deaths, but we don't know how many of those had caesareans. Three women died from sepsis after caesareans, but two were already ill before they had an emergency section, so only one may be related to the operation.

This works out to at least 27 caesarean- related deaths.

After the last report, AIMS pointed out to CEMACH that the data should include the reason for the current or previous section, and how necessary it was. Obstetricians have been slow to admit the increased risk in every subsequent pregnancy after a caesarean, and that it increases with each additional one. Even now, women who agree to possibly avoidable sections are not giving informed consent. The well-known increased incidence of placenta praevia and placenta accreta (where the placenta is so embedded in the uterus that removing it is likely to cause a torrential haemorrhage) is dismissed because they can "do an elective section next time".

They don't say you may need a hysterectomy to stop the bleeding and lose your fertility, or that fatal bleeding may not wait until your baby is old enough to be born.

We are also increasingly worried about the quality of surgery, given the number of reports we've had from mothers whose scar separated after they got home, and that women are being sent home earlier and earlier. The literature raises the question of whether single-layer closures are contributory. This report suggests that surgical student numbers may have fallen as a result of changes in immediate training.

There would be more anaesthetic deaths but for the fact that most sections are done nowadays under spinal or epidural anaesthesia, which is rarely fatal. But a general anaesthetic is still used (especially for urgent C-sections), and this is more dangerous and more difficult in a heavily pregnant woman, especially if she is obese.

Finally, postoperative care, always high in our postbag of complaints at AIMS, comes in for some swingeing criticism from women who have had C-sections or instrumental births. Managers short of staff sometimes put their worst midwives on postnatal care, or they may be diluted by semi-trained staff. As consumers, we want directentry, dedicated midwives, not nurses who have already been imbued with the 'doctor knows best' culture. And are women now losing out on postoperative nursing skills when serious complications are missed?

## Death by haemorrhage

"Recent changes in medical training may be relevant to the increased number of deaths from haemorrhage. Reduction in the length of obstetric training and working hours . . . may have reduced the amount of experience gained" - page 92

Haemorrhage is not the biggest cause of death, but there has been a mysterious rise-which is worrying. There were 17 deaths compared with only seven in the previous report, and the death rate has gone up sharply from 3.3 to 8.5 per million. We would have expected cases caused by placenta praevia or accreta (due to previous caesareans) to increase, but this did not happen, despite the rising section rate.

But deaths after vaginal birth shot up from one last time to 10 in this report - although we have no details

of what kind of vaginal birth. Five women were having their first baby; 12 had emergency hysterectomies which failed to save them. There haven't been this many deaths since 1988-1990 (an exceptionally bad period). Care was judged substandard in 80 per cent of cases and, in two cases, the quality of surgery was questionable.

Two of the 17 women who died had apparently avoided healthcare because they were afraid of Social Services taking their babies - and bled to death at home.

Sadly, the Enquiry's explanation for the increase in deaths is somewhat economical with the truth. Apart from the two who had no care, there were two Jehovah's Witnesses who refused blood transfusions, and the report says that without these four cases, the rate would not be so high. But we have longer memories. There were four Jehovah's Witnesses deaths in 1991-1993, and the mortality rate then was still lower than now. We are still awaiting a reply to our query about this.

In some cases, women known to be at high risk were cared for in maternity units that did not have the facilities to deal with such serious emergencies.

But there is another intriguing issue. Current attempts to save lives by infusing extra fluid while waiting for blood may also be killing women. The fluid is meant to keep up the falling blood pressure and reduce the heart rate. But the resultant diluted blood carries less oxygen, and is also less able to clot, leading to further blood loss.

In addition, when cold fluids are infused, the risk of a heart attack under anaesthesia rises. This is now under investigation. The emphasis should be on finding the source of bleeding and stopping it, says the Enquiry.

Many of the women who contact AIMS because of postnatal haemorrhage blame it on the excessive force used by doctors during delivery, or on the management of their labour. We are reminded of a study, done by a midwife at Northwick Park, which found that some senior registrars (and some midwives) had a far higher haemorrhage rate than others:2 we are asking CEMACH to look into this. One woman who survived bleeding after a hysterectomy told us she would rather have died as she can have no more children.

This is an area where it is particularly important to look at near-misses, and we also would like all cases of caesarean- hysterectomies (where women survived) to be reported and investigated.

## Other causes of death

Thromboembolism (blood clots) is still the most common direct cause of maternal deaths - there were 30 in this report. Fortunately, the rate seems to be going down, although risk factors such as caesareans, older mothers and obesity have all increased. Again, this may be because doctors have learned to use blood-thinners like heparin, and surgical stockings. Women may also be listening to advice about air travel and other long journeys. Bed-rest is also dangerous - one mother died because of her cultural

tradition of staying in bed for a month.

Care was considered substandard in 57 per cent of cases. Once again, there were failures in diagnoses by GPs and A&E departments and, when preventative measures were taken, inadequate drug dosages may have been used.

There were 14 deaths from genital tract sepsis ('puerperal fever', a major killer in previous centuries) and four other deaths it helped to cause. Eighty per cent had suboptimal care, usually failure to suspect the cause and act quickly. One death followed amniocentesis; a few followed miscarriage or termination. As such deaths nowadays are rare, many doctors and midwives will not have seen any cases, and will be unaware of how subtle the onset can be and how rapidly it can become fatal. Many women were beyond saving by the time they reached hospital. Vomiting, diarrhoea and abdominal pain are often mistaken for stomach upset; there may not be a rise in temperature. But overwhelming infection can develop in a matter of hours and rapidly lead to death. Early recognition is crucial, so educating GPs, A&E doctors, health visitors and especially community midwives, especially now that women are discharged so early, is essential. Prolonged rupture of membranes is a risk factor (especially with vaginal examinations), and so is retaining part of the placenta. We know that meningitis referrals increased when symptoms were widely publicised to the public, so why not inform new parents of the symptoms of genital tract sepsis?

Two of the women had home births (though another seems to have been admitted to hospital and become ill after discharge). One had a water birth where "faecal contamination" was assumed to be the cause. However, no proof of a causal connection was given, and we don't know whether it was a home or hospital birth. We have asked for more details.

The most common causal organism was beta-haemolytic streptococcus (Bstrep), now carried by many women - as we know from the increasing number of cases where it has killed babies.

There were 14 deaths from preeclampsia and eclampsia; five were less than 30-weeks pregnant. Nearly half (46 per cent) had substandard care and may have been avoidable. The main problem was inadequate treatment of high blood pressure. Automated measuring devices can underestimate blood pressure, so should not be used in preeclampsia. One woman should have been induced, but this was postponed because of a lack of special baby-care cots: she should have had priority. There were cases where community midwives failed to check urine for protein, as have been reported to AIMS.

There were five deaths due to amniotic fluid embolism (where the fluid enters the mother's circulation), fewer than previous reports. Two had been induced with prostaglandins and one by oxytocin, both of which can cause intense contractions, possibly increasing the risk. Women collapse fairly rapidly and it may not be possible to save them. However, milder cases when mothers survive may not be diagnosed, so we do not know how rare the condition actually is.

Five women died after termination of pregnancy or failure to terminate in time, an increase from two deaths last time. Delays may have contributed to two of these deaths. Of these, one was referred early, but not seen until 16 weeks, when she needed a D&C (dilatation and curettage). Another had serious

heart disease and needed urgent termination to save her life, but this was delayed because she was rejected by an administrator as 'out of area'. She died while waiting. Another woman died of sepsis: a routine swab showing B-strep did not reach the doctor until after her death. A further woman, who was high risk because of obesity, had a termination at an isolated charity unit without emergency services.

Although abortions aren't a big part of AIMS' workload, there now seem to be more cases reported where delays are putting lives at risk. One woman who wanted termination because she gets life-threatening severe postnatal mental illness was delayed to the point where it was no longer possible. She became ill again after the birth and nearly killed herself, which would have left her children (already deserted by the father) motherless.

There were 14 deaths due to ectopic pregnancy (outside of the womb, usually in a fallopian tube which then ruptures as the embryo grows). This was one more than in the previous report. Yet again, the problem is not suspected by GPs or A&E doctors, and so the right tests aren't done.

In the next AIMS Journal, we will be looking behind the figures of maternal deaths due to suicide - the number one killer - as well as murder, drug addiction and organisational mishaps.

**References**

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